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INFORMATION DISCLOSURE STATEMENT BY APPLICANT First Supplemental (use as many sheets as necessary)				Complete if Known	
				Application Number	10/688,125
				Filing Date	October 17, 2003
				First Named Inventor	Jonathan N. Howarth
				Art Unit	—
				Examiner Name	—
				Attorney Docket Number	SU-7155-C
Sheet	1	of	1		

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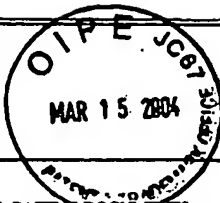
Examiner Signature	<i>Mark Cery</i>	Date Considered	1/21/07
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ATTY. DOCKET NO.: SU-7155-C

SERIAL NO.: 10/688,125

APPLICANT: JONATHAN N. HOWARTH ET AL.

FILING DATE: OCTOBER 17, 2003

GROUP:

REFERENCE DESIGNATION

U. S. PATENT DOCUMENTS

EXAMINER INITIAL	CITE NO.	DOCUMENT NUMBER							DATE	NAME			FILING DATE IF APPROPRIATE
M	US-1	2	1	3	0	8	0	5	09-20-1938	Levine			
	US-2	2	3	9	2	5	0	5	01-8-1946	Rogers			
	US-3	2	3	9	8	5	9	8	04-16-1946	Rogers			
	US-4	2	7	7	9	7	6	4	01-29-1956	Paterson			
	US-5	2	7	9	5	5	5	6	06-11-1957	Quinn			
	US-6	2	8	6	8	7	8	7	01-13-1959	Paterson			
	US-7	2	9	2	0	9	9	7	01-12-1960	Wolf et al.			
	US-8	2	9	7	1	9	5	9	02-14-1961	Waugh et al.			
	US-9	2	9	7	1	9	6	0	02-14-1961	Waugh et al.			
	US-10	3	1	2	1	7	1	5	02-18-1964	Waugh et al.			
	US-11	3	1	4	7	2	5	9	09-01-1964	Paterson			
	US-12	3	3	4	5	3	7	1	10-03-1967	Paterson			

FOREIGN PATENT DOCUMENTS

	CITE NO.	DOCUMENT NUMBER							DATE	COUNTRY			TRANSLATION YES NO
M	FP-1	1	2	3	0	8	2	5	12-29-1987	Canada			
	FP-2	2	0	4	2	4	3	0	11-30-1991	Canada			
	FP-3	2	1	6	3	5	9	6	09-04-1996	Canada			
	FP-4	0	1	7	7	6	4	5	04-16-1986	EPO			
	FP-5	0	2	0	6	7	2	5	12-30-1986	EPO			
	FP-6	0	2	2	8	5	9	3	07-15-1987	EPO			
	FP-7	0	5	8	1	8	2	6	02-09-1994	EPO			

OTHER ENCLOSED DOCUMENTS

	CITE NO.	
M	L-1	Corral et al., "Substitution in the Hydantoin Ring. III. Halogenation", J. Org. Chem., 1963, Vol. 28, ppg. 1100-1104.
	L-2	Jolles, "General Methods of Bromination", Bromine and its Compounds, 1966, Ernest Benn, London, ppg. 365.
	L-3	Markish et al., "New Aspects on the Preparation of 1,3-Dibromo-5,5-Dimethylhydantoin", Ind. Eng. Chem. Res. 1995, Vol. 34, ppg. 2125-2127.
	L-4	Orazi et al., "Halogenacion con 3-Bromo-5,5-Dimetil-Hidantoina", Anales Assoc. Quim. Argentina, 1949, Vol. 37, ppg. 192-196. (Not translated)
	L-5	Orazi et al., "Halogenacion Con 1-3-Dibromo-5,5-Dimetil-Hidantoina", Anales Assoc. Quim. Argentina, 1950, Vol. 38, ppg. 5-11. (Not translated)
	L-6	Gottarai: Reaction of C <sub>2</sub> H <sub>4</sub> - In Aqueous solution (76 Zeutralks. Bakteriöl., Parasiteukd., ) In Fektiönskr. Hyg., Abt. I; Orig., Geihe B 162 (3-4), 384-8.

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	US-13	3	6	2	6	9	7	2	12-14-1971	Lorenzen			
	US-14	4	0	7	8	0	9	9	03-07-1978	Mazzola			
	US-15	4	1	1	9	5	3	5	10-10-1978	White et al.			
	US-16	4	1	2	6	7	1	7	11-21-1978	Mazzola			
	US-17	4	1	3	6	4	5	2	01-23-1979	Mazzola			
	US-18	4	1	9	9	0	0	1	04-22-1980	Kratz			
	US-19	4	2	4	2	2	1	6	12-30-1980	Daugherty et al.			
	US-20	4	2	7	0	5	6	5	06-02-1981	King, Sr.			
	US-21	4	2	9	3	4	2	5	10-06-1981	Price			
	US-22	4	3	2	7	1	5	1	04-27-1982	Mazzola			
	US-23	4	3	3	1	1	1	4	05-25-1982	King, Sr.			
	US-24	4	4	2	7	6	9	2	01-24-1984	Girard			
	US-25	4	4	5	1	3	7	6	05-29-1984	Sharp			
	US-26	4	4	6	5	8	3	9	08-14-1984	Schulte et al.			
	US-27	4	5	3	2	3	3	0	07-30-1985	Cole			
	US-28	4	5	3	7	6	9	7	08-27-1985	Girard			
	US-29	4	5	4	0	7	4	6	12-24-1985	Girard et al.			
	US-30	4	5	7	1	3	3	3	02-18-1986	Hsiao et al.			
	US-31	4	5	9	7	9	4	1	07-01-1986	Bottom et al.			
	US-32	4	6	2	1	0	9	6	11-04-1986	Cole			
	US-33	4	6	5	4	4	2	4	03-31-1987	Girard et al.			
	US-34	4	6	5	9	3	5	9	04-21-1987	Lorenz et al.			

FOREIGN PATENT DOCUMENTS

	CITE NO.	DOCUMENT NUMBER							DATE	COUNTRY			TRANSLATION YES NO	
	FP-8	1	0	5	1	2	4	3	01-1967	Great Britain				
	FP-9	1	6	0	0	2	8	9	10-14-1981	United Kingdom				
	FP-10	2	2	7	3	1	0	6	06-08-1994	Great Britain				
	FP-11	56	1	5	8	3	3	3	12-07-1981	Japan			X	
	FP-12	7	2	9	9	4	6	8	11-14-1995	Japan			X	

OTHER ENCLOSED DOCUMENTS - NON PATENT LITERATURE

	CITE NO.	
	L-7	March, "Advanced Organic Chem.", 1992, 4 <sup>th</sup> Edition, ppg. 639-640
	L-8	HCAPLUS Abstract of JP 07171576 A2 issued 1995.
	L-9	HCAPLUS Abstract of JP 07277912 A2 issued 1995.
	L-10	HCAPLUS Abstract of JP 08027119 A2 issued 1996.

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EXAMINER INITIAL	CITE NO.	DOCUMENT NUMBER							DATE	NAME				FILING DATE IF APPROPRIATE													
K	US-35	4	6	6	2	3	8	7	05-05-1987	King, Sr.																	
	US-36	4	6	7	7	1	3	0	06-30-1987	Puzig																	
	US-37	4	6	9	8	1	6	5	10-06-1987	Theyson																	
	US-38	4	7	1	3	0	7	9	12-15-1987	Chun et al.																	
	US-39	4	7	2	8	4	5	3	03-01-1988	Choy																	
	US-40	4	2	4	5	1	8	9	05-17-1988	Lee et al.																	
	US-41	4	7	8	0	1	9	7	10-25-1988	Schuman																	
	US-42	4	8	0	3	0	7	9	02-07-1989	Hsiao et al.																	
	US-43	4	8	6	7	8	9	5	09-19-1989	Choy																	
	US-44	4	9	1	9	9	4	1	04-24-1990	Kamel et al.																	
	US-45	4	9	2	5	8	6	6	05-15-1990	Smith																	
	US-46	4	9	6	4	8	9	2	10-23-1990	Hsu																	
	US-47	5	0	7	6	3	1	5	12-31-1991	King																	
	US-48	5	1	3	1	5	6	3	08-11-1992	Valkanias																	
	US-49	5	2	1	8	9	8	3	06-15-1993	King																	
	US-50	5	3	3	8	4	6	1	08-16-1994	Jones																	
	US-51	5	3	3	9	8	8	9	08-23-1994	Bigham																	
	US-52	5	3	8	4	1	0	2	01-24-1995	Ferguson et al.																	
	US-53	5	4	0	3	8	1	3	04-04-1995	Lichti et al.																	
	US-54	5	4	2	2	1	2	6	06-06-1995	Howarth et al.																	
US-55	5	4	7	6	1	1	6	12-19-1995	Price et al.																		
US-56	5	5	6	5	1	0	9	10-15-1996	Sweeny																		
US-57	5	5	6	5	5	7	6	10-15-1996	Hall et al.																		

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER							DATE	COUNTRY			TRANSLATION YES NO
✗ ✗ ✗ ✗	FP-13	8	9	1	0	6	9	6	11-16-1989	WIPO			
	FP-14	9	6	3	0	4	9	1	10-03-1996	WIPO			
	FP-15	9	7	1	5	6	5	2	05-01-1997	WIPO			
	FP-16	9	7	2	0	5	4	6	06-12-1997	WIPO			

OTHER ENCLOSED DOCUMENTS

✗ ✗ ✗	L-11	Chowhan et al., "Hardness Increase Induced by Partial Moisture Loss in Compressed Tablets and Its Effect on In Vitro Dissolution", J. Pharm. Sciences, October 1978, Vol. 67, No. 10, ppg. 1385-1389.
	L-12	Krycer et al., "An Evaluation of Tablet Binding Agents Part II. Pressure Binders", Powder Technology, 1983, Vol. 34, ppg. 53-56.
	L-13	Petterson, "N-Halogen Compounds. I. Decomposition of 1,3-Dichloro-5,5-dimethylhydantoin in Water at pH 9", J. Org. Chem., 1959, Vol. 24, ppg. 1414-1419.

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<i>MC</i>	US-58	5	5	7	8	5	5	9	11-26-1996	Dolan et al.			
	US-59	5	5	9	1	6	9	2	01-07-1997	Jones et al.			
	US-60	5	6	0	3	9	4	1	02-18-1997	Farina et al.			
	US-61	5	6	1	0	1	2	6	03-11-1997	Barford et al.			
	US-62	5	6	1	4	6	2	8	03-25-1997	Jones et al.			
	US-63	5	6	7	0	4	5	1	09-23-1997	Jones et al.			
	US-64	5	7	5	0	0	6	1	05-12-1998	Farina et al.			
	US-65	5	7	5	3	6	0	2	05-19-1998	Hung et al.			
	US-66	5	7	5	6	4	4	0	05-26-1998	Watanabe et al.			
	US-67	5	7	6	3	1	7	6	0609-1998	Ward et al.			
	US-68	5	7	8	0	6	4	1	07-14-1998	Yerushalmi et al.			
	US-69	5	8	5	9	0	6	0	01-12-1999	Plant			
	US-70	5	9	4	2	1	5	3	08-24-1999	Heydel			
	US-71	5	9	5	8	8	5	3	09-28-1999	Watanabe			
	US-72	5	9	7	2	8	6	4	10-26-1999	Counts			
	US-73	5	9	8	1	4	6	1	11-09-1999	Counts et al.			
	US-74	5	9	8	4	9	9	4	11-16-1999	Hudson			

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER							DATE	COUNTRY			TRANSLATION YES NO
<i>MC</i>	FP-17	9	7	2	0	9	0	9	06-12-1997	WIPO			
	FP-18	9	7	4	3	2	6	4	11-20-1997	WIPO			
	FP-19	9	7	4	3	3	9	2	11-20-1997	WIPO			
	FP-20	9	0	3	4	1	8	6	06-15-2000	WIPO			

OTHER ENCLOSED DOCUMENTS

<i>MC</i>	L-14	HCAPLUS Abstract of JP 08239699 A2 issued 1996.											
	L-15	HCAPLUS Abstract of JP 09087684 A2 issued 1997.											
	L-16	HCAPLUS Abstract of JP 09227317 A2 issued 1997.											
	L-17	Hayward America's #1 Pool Water Systems Product Catalog, "Automatic Chemical Feeders" "Chlorinators (Slow Dissolve Tri-Chlor Only) and Brominators, Hayward Pool Products Inc. Website, < <a href="http://www.haywardnet.com/products/catalog/displayProdInfo.cfm?itemID=61">http://www.haywardnet.com/products/catalog/displayProdInfo.cfm?itemID=61</a> >, 2 pages.											
	L-18	Author unknown, "Big Brother Brominator - Brominators", Bulky Systems Website, < <a href="http://www.bulkysystemsinc.com/brominator.html">http://www.bulkysystemsinc.com/brominator.html</a> > (Visited August 10, 2001). 1 page.											
	L-19	Hayward Pool Products Owner's Guide, Installation and Operating Instructions, "Hayward Chemical Feeder", Models C250CF, C500CF, C1100CF, C1800CF, C2400CF, - 1998 - 4 pages											
	L-20	Hayward America's #1 Pool Water Systems Product Catalog, "Automatic Chemical Feeders" "Chlorinators (Slow Dissolve Tri-Chlor Only) and Brominators, Buyers Guide, Hayward Pool Products Inc., Website, < <a href="http://www.haywardnet.com/products/catalog/displayProdInfo.cfm?itemID=60">http://www.haywardnet.com/products/catalog/displayProdInfo.cfm?itemID=60</a> >, 2 pg											
	L-21	Pentair Pool Products Brochure, "Rainbow High Capacity Chlorine/Bromine Feeders", "Unsurpassed Performance From The Industry's Leader in Automatic Sanitizing of Large Residential and Commercial Pools", date unknown, 1 page.											

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